

# 6DQ6-B

## Beam Power Tube

### GENERAL DATA

#### Electrical:

Heater, for Unipotential Cathode:

Voltage (AC or DC) . . . . . 6.3  $\pm$  10% volts  
Current at 6.3 volts. . . . . 1.2 amp

Mu-Factor, Grid No.2 to Grid No.1

for plate volts = 150, grid-No.2  
volts = 150, grid-No.1 volts = -22.5. . . 4.4

Direct Interelectrode Capacitances  
(Approx.):\*

Grid No.1 to plate. . . . . 0.5  $\mu\mu\text{f}$   
Grid No.1 to cathode & grid No.3,  
grid No.2, and heater . . . . . 15  $\mu\mu\text{f}$   
Plate to cathode & grid No.3,  
grid No.2, and heater . . . . . 7  $\mu\mu\text{f}$

#### Characteristics, Class A<sub>1</sub> Amplifier:

Plate Voltage . . . . . 60 250 volts  
Grid-No.2 Voltage . . . . . 150 150 volts  
Grid-No.1 Voltage . . . . . 0 -22.5 volts  
Plate Resistance (Approx.). . . . . - 18000 ohms  
Transconductance. . . . . - 7300  $\mu\text{mhos}$   
Plate Current . . . . . 345<sup>b</sup> 65 ma  
Grid-No.2 Current . . . . . 27<sup>b</sup> 1.8 ma  
Grid-No.1 Voltage (Approx.) for  
grid-No.2 volts = 150, plate ma. = 1,  
plate volts =  
250 . . . . . - -42 volts  
5000. . . . . - -100 volts

#### Mechanical:

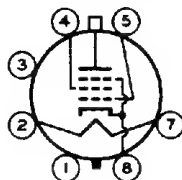
Operating Position. . . . . Any  
Maximum Overall Length. . . . . 4-1/4"  
Seated Length . . . . . 3-1/2"  $\pm$  3/16"  
Diameter. . . . . 1.438" to 1.562"  
Bulb. . . . . T12  
Cap . . . . . Skirted Miniature (JEDEC No.C1-3)  
Base. . . . . Short Medium-Shell Octal 7-Pin  
with External Barriers, Style A, Arrangement 1  
(JEDEC No.B7-111),  
Short Medium-Shell Octal 7-Pin  
with External Barriers, Style B, Arrangement 1  
(JEDEC No.B7-119),  
Short Medium-Shell Octal 6-Pin  
with External Barriers, Style A, Arrangement 2  
(JEDEC No.B6-148), or  
Short Medium-Shell Octal 6-Pin  
with External Barriers, Style B, Arrangement 2  
(JEDEC No.B6-122)



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Basing Designation for BOTTOM VIEW. . . . . 6AM

Pin 1<sup>c</sup>—No Connec-  
tion  
Pin 2—Heater  
Pin 3—No Connec-  
tion  
Pin 4—Grid No.2



Pin 5—Grid No.1  
Pin 7—Heater  
Pin 8—Cathode,  
Grid No.3  
Cap—Plate

## HORIZONTAL-DEFLECTION AMPLIFIER

### Maximum Ratings, Design-Maximum Values:

*For operation in a 525-line, 30-frame system<sup>d</sup>*

DC PLATE-SUPPLY VOLTAGE . . . . .	770	max.	volts
PEAK POSITIVE-PULSE PLATE VOLTAGE <sup>e</sup> . . . . .	6500	max.	volts
PEAK NEGATIVE-PULSE PLATE VOLTAGE . . . . .	1500	max.	volts
DC GRID-No.2 (SCREEN-GRID) VOLTAGE. . . . .	220	max.	volts
PEAK NEGATIVE-PULSE GRID-No.1 VOLTAGE . . . . .	330	max.	volts
CATHODE CURRENT:			
Peak. . . . .	610	max.	ma
Average . . . . .	175	max.	ma
GRID-No.2 INPUT . . . . .	3.6	max.	watts
PLATE DISSIPATION <sup>f</sup> . . . . .	18	max.	watts
PEAK HEATER-CATHODE VOLTAGE:			
Heater negative with respect to cathode . . . . .	200	max.	volts
Heater positive with respect to cathode . . . . .	200 <sup>g</sup>	max.	volts
BULB TEMPERATURE (At hottest point on bulb surface). . . . .	220	max.	°C

### Maximum Circuit Values:

Grid-No.1-Circuit Resistance:

For grid resistor-bias operation. . . . . 1 max. megohm

<sup>a</sup> Without external shield.

<sup>b</sup> This value can be measured by a method involving a recurrent wave form such that the maximum ratings of the tube will not be exceeded.

<sup>c</sup> On the 6-pin bases, pin 1 as well as pin 6 is omitted.

<sup>d</sup> As described in "Standards of Good Engineering Practice Concerning Television Broadcast Stations," Federal Communications Commission.

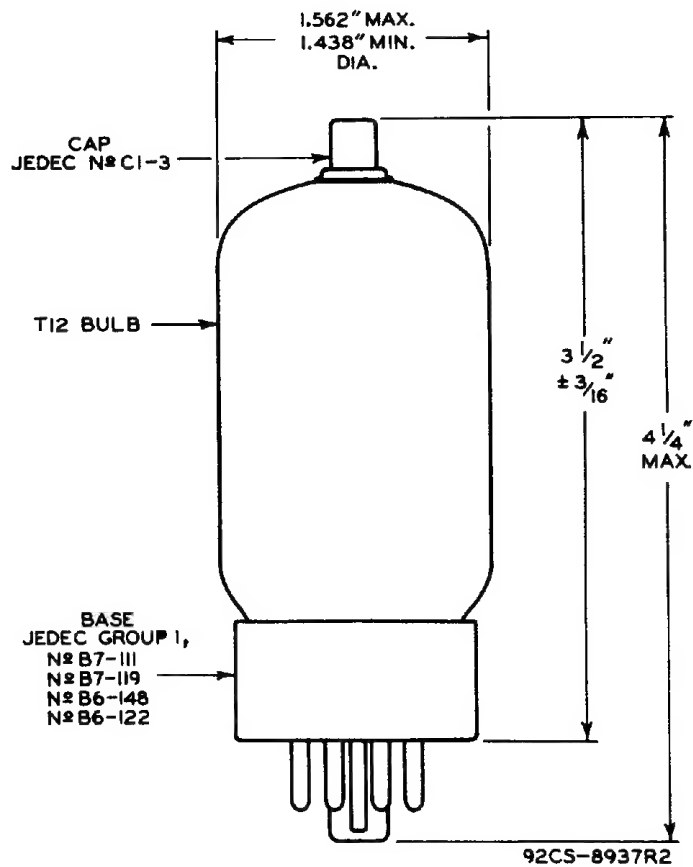
<sup>e</sup> This rating is applicable where the duration of the voltage pulse does not exceed 15 per cent of one horizontal scanning cycle. In a 525-line, 30-frame system, 15 per cent of one horizontal scanning cycle is 10 microseconds.

<sup>f</sup> An adequate bias resistor or other means is required to protect the tube in the absence of excitation.

<sup>g</sup> The dc component must not exceed 100 volts.



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RADIO CORPORATION OF AMERICA  
Electron Tube Division  
Harrison, N. J.

DATA 2  
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